



LOUISIANA
PERSONAL OBSERVATION LOG BOOK

Hunting Season Year: _____

Observer: _____

Please return by Dec. 1 to:

LDWF

Attn: Deer Observation Booklet

P.O.Box 98000

Baton Rouge, LA. 70898

**Explanation of Terms Used in the
LDWF Deer Observation Log Book**

If you would like to continue assisting LDWF in collecting this data in future years, please provide your contact information:

Name _____

Street _____

City: _____ State: _____ Zip: _____

E-mail: _____

Date: The date the observation was made.

AM/PM: The time of day when the observation period took place. AM is before 12:00pm (noon) and PM is 12:00 PM and after. If the entire day is spent observing or hunting, divide the observations into AM (before 12:00PM) and PM (12:00 PM and after).

Total Hours: Total number of hours spent observing deer during the observation period. This may include observations made while scouting, and approaching or leaving the hunting area. The number of total hours should be rounded to the nearest 15-minute interval.

Area/Stand: The type of habitat or area the stand occurs in. For example: hardwoods, food plot, pine plantation, mixed pine hardwoods, etc.

Bucks: Definition of point= projection 1" or longer.
1-3 points= number of bucks observed with 1-3 antler points.
4-7 points= number of bucks observed with 4-7 antler points.
8+ points= number of bucks observed with 8 or more antler points.

Does: Number of does observed that are 1.5 years of age or older.

Fawns: Number of male and female fawns observed.

Unknown: The number of deer observed that can not be distinguished as being a buck, doe, or fawn.

Parish: Please record the parish where the observations were made.

**Guidelines for Collecting
Deer Observations**

Instructions

To properly collect observation data, count every individual deer you see during an observation period. The more accurate the data, the better the management and decision making criteria will be.

Because an index, not an absolute count, of population characteristics is calculated from observation data, a count of every individual deer is not required. If a deer can not be positively identified as a buck, doe, or fawn, record it as "unknown". Do not record the deer as something you don't know for sure. This can lead to inaccurate conclusions if a large amount of data follows this pattern.

The following calculations are provided for your interest. Computing these calculations can provide you information about your deer herd. These calculations are not required.

Calculating Deer Population Indices using Observation Data
Indices of deer population characteristics that can be estimated using observation data include the following:

- 1) relative abundance
- 2) sex ratio
- 3) fawn recruitment
- 4) age structure

Following is an example of estimating deer population indices using observation data.

Total observation hours:	600
Total deer observations:	400
Adult buck observations (1.5+ years of age)	80
Bucks with 1-3 pts:	15
Bucks with 4-7 pts:	40
Bucks with 8+ points	25

Adult doe observations (1.5+ years old):	160
Fawn observations (male and female)	100

Index Calculations:

Sighting Rate:

Total Deer: $600 \div 400 = 0.67$

Adult Buck observations

(1.5 + years old): $80 \div 400 = 0.2$

Bucks with 1-3 pts: $15 \div 400 = 0.04$

Bucks with 4-7 pts: $40 \div 400 = 0.1$

Bucks with 8+ pts: $25 \div 400 = 0.06$

Buck:Doe Ratio: $160 \div 80 = 2.0 = 1:2.0$

Buck:Doe Ratio

Fawn recruitment: $100 \div 160 = 0.63$ fawns/doe

Or 63% fawn recruitment

Relative Abundance

Observation data can not be used to calculate actual deer abundance, but the data can be used to estimate trends (or indices) of abundance. From the above example, the sighting rate of total deer is 0.67 or 0.67 deer per hour. This is a starting point for future comparisons of total abundance.

If observer ability and habitat conditions are relatively constant over time, this sighting rate can be used as an index for total abundance. Observation data can also be used to estimate an index of components to the buck population. From the example above, the sighting rate for bucks with 8+ antler points was 0.06. If increasing the number of bucks with 8+ points is a management goal, success of that goal can be measured by comparing the sighting rate of bucks with 8+ points over time. A sharp increase in any index is an indicator of an increase in the characteristic being measured, and a decrease indicates a decrease in the characteristic measured.

Sex Ratio

The sex ratio of a deer population is the ratio of does to bucks. More

specifically, adult sex ratio and total sex ratio are estimated to make management decisions. The adult sex ratio is the ratio of adult does (1.5+ years of age) to adult bucks (1.5+ years of age) in the population. The total sex ratio is the ratio of all females to all males in the population. The total sex ratio includes fawns and the adult sex ratio does not include fawns. In our example 160 doe observations and 80 buck observations were made. The adult sex ratio is $160 \div 80$ or 2:1. The use of adult sex ratio is better than the use of total sex ratio for making management decisions because it indicates the number of adult bucks in the herd.

Fawns per doe/fawn recruitment

Fawn recruitment can easily be estimated using observation data.

Fawn recruitment estimates can be used as an index of deer population's nutritional status. In quality habitat, adult does can produce twins or triplets. If habitat quality is poor, fawn recruitment will decrease. From the above example, fawn recruitment is calculated by dividing the number of fawn observations (100) by the number of adult doe observations (160), yielding a fawn recruitment of 63%.

The estimate can also be viewed as 63 fawns/100 adult does or 0.63 fawns per doe.

Age Structure

Age structure of a deer herd can be determined by aging lower jawbones of harvested deer with age determined based on tooth wear and replacement. However, if selective buck harvest is employed, determination of age structure may be biased. Observation data can provide a better estimate of age structure if selective harvest is used. Bucks and does can be classed as fawns, yearlings, and 2.5+ years old. With more experience, observers can age bucks as fawns, yearlings, 2.5 years old, and 3.5+ years old.
